



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/595,849

06/27/2006

Jean-Thomas Ferreri

1013-049

7842

22429

7590

07/16/2009

LOWE HAUPTMAN HAM & BERNER, LLP
1700 DIAGONAL ROAD
SUITE 300
ALEXANDRIA, VA 22314

EXAMINER

ZUNIGA, JACKIE

ART UNIT

PAPER NUMBER

2458

MAIL DATE

DELIVERY MODE

07/16/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/595,849	Applicant(s) FERRERI, JEAN-THOMAS	
	Examiner JACKIE ZUNIGA	Art Unit 2458	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 11-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 May 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-8, and 11-19 are presented for examination.
2. Claims 1-8, 12, and 13 are amended.
3. Claims 9-10 are cancelled.
4. Claims 14-19 are new.

Response to Arguments

5. Applicant's arguments, filed 3/30/2009, with respect to the rejection(s) of claim(s) 1 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Joo, et al., WO 01/65396, in view of Applicant's Admitted Prior Art.

Drawings

6. Figure 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C.112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. **Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.** Claim 12 recites the limitation "execution of the .ocx file" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. **Claims 1-4, and 12-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joo et al., (hereinafter Joo), WO 01/65396, in view of Applicant's Admitted Prior Art, (hereinafter AAPA).**
11. **As per claim 1, Joo discloses a video-projection apparatus comprising**

At least one terminal [fig. 1, producer client 200] including video data to be projected [fig. 1, p. 4, lines 28-30, p. 5, lines 1-5, producer client 200 producing data including video to be transmitted to a viewer client], a server [fig. 1, broadcasting server 400] and a projector [fig. 1, viewer client 600], the server being connected to the projector by hardwire connection [p.8, lines 9-20, the internet 800 can be realized as a wired connection], and being accessible via a communication network [fig. 1, internet 800], wherein the terminal is connectable, via the network, and network access software to a web site hosted by the server, to load a file including remote control projection software offering an interface whose execution by the network access software allows the projection, by use of video software adapted to the projector, of the video data displayed on the screen of terminal [fig. 3-3D, p. 11, lines 18-30, p. 12, lines 1-13, producer client 200 inputs the URL address of a site which opens a broadcasting channel for a user, the broadcasting server 400 will determine if the client requires to load a file (e.g., ActiveX) which is software necessary for producing a webcast].

Joo does not explicitly disclose the viewer client as a projector. However AAPA discloses a system wherein a server is connected to a projector [fig. 2].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the apparatus of Joo by including a projector as a viewer client as disclosed by APPA because it would provide Joo's apparatus with the enhanced capability of being able to display data to a plurality of people, allowing the system to be used in multiple environments (meetings, conferences, homes, etc.).

Art Unit: 2458

12. **As per claim 2**, Joo discloses the video projection apparatus as on claim 1, but he does not explicitly disclose:

Wherein the terminal and the server each comprise a network card enabling them to connect to the communication network and to communicate together via the communication network.

Wherein the terminal and the server each comprise a network card enabling them to connect to the communication network and to communicate together via the communication network [fig. 2, AAPA describes terminal 1 and server 2 communicating through network cards 10 and 20 respectively via a wireless network].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the apparatus of Joo by including a projector as a viewer client as disclosed by APPA because it would provide Joo's apparatus with the enhanced capability of improving connectivity in the system.

13. **As per claim 3**, Joo discloses the video-projection apparatus

Wherein the communication network includes a wireless network [fig. 1, internet 800].

14. **As per claim 4**, Joo discloses a method of activating a video projector so it projects video data displayed on a screen of a terminal [fig. 3-3D], the method comprising:

Entering a determined URL address into the network access software to access a web site hosted by a server via the internet communication network [fig. 1, 3, p. 11, lines 18-21, p.14, lines 7-30, the server 400 hosting the URL will be connected to the producer client 200 through the Internet 800],

Wherein the method further comprises

Loading a web page from said web site in the network access software of the terminal, with which a file is linked, the software comprising remote control projection software offering an interface enabling the network access software and the scripts of the web page to execute and control the file [fig. 1, 3-3D, p. 12, lines 6-30, loading an application for a broadcasting channel, the broadcasting server 400 will determine if the client needs a client programs for broadcasting (e.g. ActiveX), if needed server will install the program and display an initial screen "broadcasting screen" in the display of the producer client 200].

Then sending video data displayed on the screen of the terminal to the communication network by executing the file with the network access software [fig. 1, 3-3D, p. 13, lines 5-30, video data to be broadcasted is captured and transmitted to the broadcasting server 400 through internet 800],

Receiving video data by video software adapted to the video projector, the video software being installed on the server, and transmitting the video data received by the video software to the video projector [fig. 4, p. 15, lines 18-30, p. 16, lines 1-16, unit 440 receives video data produced by the client and the distribution main server processor transmits data to the viewer client 600],

Joo does not explicitly disclose executing network access software on the terminal while the terminal is connected to an Internet communication network; however Joo discloses the producer client 200 inputting the URL address of a site which opens a broadcasting channel for the user [fig. 1, 3, p. 11, lines 18-21, p.14, lines 7-30].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to input a URL by executing network access software on the terminal. It is well known that in order to enter a URL a network access software must be executed in a terminal; hence an ordinary artisan would find executing a network access software obvious.

Joo does not explicitly disclose the viewer client as a projector. However AAPA discloses a system wherein a server is connected to a projector [fig. 2].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the method of Joo by including a projector as a viewer client as disclosed by APPA because it would provide Joo's method with the enhanced capability of being able to display data to a plurality of people, allowing the system to be used in multiple environments (meetings, conferences, homes, etc.).

15. **As per claim 12**, Joo discloses the video-projection method as in claim 4,

Wherein execution of the file is prompted by activating a button associated with the file execution function, and shown on the web page with which the file is linked [fig. 3-3D, p. 12, lines 6-30, a "broadcasting screen" containing a various functional buttons for activating the broadcasting].

16. **As per claim 13**, Joo discloses the video-projection method as in claim 12,

Wherein stopping of the projection is prompted by activation of a button associated with the stop function of the file execution function and shown on the web page with which the file is linked [fig. 3C, p. 12, lines 6-30, an end broadcasting button for ending the broadcast, as part of the initial screen of the client program for broadcasting (e.g. ActiveX)].

17. **As per claim 14**, Joo discloses the apparatus of claim 1

Wherein the file is an .ocx extension file [p. 12, lines 6-13].

18. **As per claim 15**, Joo discloses the method of claim 4

Wherein the file is an .ocx extension file [p. 12, lines 6-13].

19. **As per claim 16**, Joo discloses a video projection apparatus comprising

At least one terminal [fig. 1, producer client 200] including (b) video data to be projected [fig. 1, p. 4, lines 28-30, p. 5, lines 1-5, producer client 200 producing data including video to be transmitted to a viewer client], a video projector [fig. 1, viewer client 600]; and a server arrangement [fig. 1, 4, broadcasting server 400] including (a) a web site server [fig. 4, web server 410] having at least one web page including remote control projection instruction software and video software [fig. 1, 4, p. 14, lines 1-30, the web server 410 provides the producer client 200 with a broadcasting client]; the terminal

Art Unit: 2458

being arranged to execute the Internet access software program of the terminal in response to an input of a user of the terminal for causing the terminal to attempt to connect to the DHCP server via a first communication link [fig. 1, p. 11, lines 18-26, the producer client 200 inputs a URL address of a site, which opens a broadcasting channel for a user]; the terminal being arranged to respond to a URL address entered into the Internet access software of the web site server by establishing a connection via the first communication link to the web site server [fig. 4, web server 410, connected to a producer client through a channel]; the server arrangement and the terminal being arranged so that the remote control projector instruction software in the web site server is loaded, via the first communication link, in memory of the terminal at a location provided for web pages of the Internet access software [fig. 3-3D p. 11, lines 18-26, an application for a broadcasting channel is displayed in the producer client 200]; the terminal being arranged so that in response to the operating system thereof executing the remote control projector instruction software the video data of the terminal are displayed on a display of the terminal [fig. 3-3D, broadcasting client, containing "broadcasting screen" is displayed in the producer client]; the server arrangement and the terminal being arranged so that, in response to the operating system of the terminal executing the remote control projector instruction software, the video data of the terminal are converted by the remote control projection instruction software of the terminal into a format comprehensible to the video software of the server arrangement and the converted data are coupled to the server via the first communication link [fig. 1, 2, p. 10, lines 3-25, p. 13, lines 5-26, the encoding unit 230, inside the producer client

Art Unit: 2458

200, compresses the captured data to facilitate the transmission to the broadcasting server 400]; the server arrangement being arranged so the converted video data are transferred from the video software to the projector via a second communication link [p. 15, lines 18-30, p. 16, lines 1-16, the distribution main server processor 442 transmits a broadcasting material produced by a producer client to a viewer client].

Joo does not explicitly disclose using internet access software on the terminal so that the instructions of the remote control projector instruction software are interpreted directly in the language of the Internet access software program and executed by the operating system of the terminal, however Joo discloses the producer client 200 inputting the URL address of a site which opens a broadcasting channel for the user [fig. 1, 3, p. 11, lines 18-21, p.14, lines 7-30].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to input a URL by using internet access software on the terminal. It is well known that in order to enter a URL an internet access software must be executed in a terminal; hence an ordinary artisan would find executing a network access software obvious.

Joo does not explicitly disclose the viewer client as a projector, and the use of a dynamic host configuration (DHCP) server and the converted video data coupled to the server arrangement via the communication link are coupled to the video software.

However AAPA discloses a system wherein a server is connected to a projector and where the data received by the network card is transmitted to video software 23 [fig. 2].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the method of Joo by including a projector as a viewer client that receives video data from video software 23 as disclosed by APPA because it would provide Joo's method with the enhanced capability of being able to display data to a plurality of people, allowing the system to be used in multiple environments (meetings, conferences, homes, etc.).

20. **As per claim 17**, Joo discloses a video projection apparatus comprising

At least one terminal [fig. 1, producer client 200] including (b) video data to be projected [fig. 1, p. 4, lines 28-30, p. 5, lines 1-5, producer client 200 producing data including video to be transmitted to a viewer client]; a video projector [fig. 1, viewer client 600]; and a server arrangement [fig. 1, 4, broadcasting server 400] including b) and video software [fig. 1, 4, p. 14, lines 1-30, the web server 410 provides the producer client 200 with a broadcasting client]; the terminal and server arrangement being connected to each other via a communication link [fig. 1, 4, internet 800]; the server arrangement and the terminal being arranged so that the remote control projector instruction software is (a) coupled to the terminal from the server arrangement via the communication link and (b) executed by the operating system of the terminal [fig. 3-3D]; the server arrangement, the communication link and the terminal being arranged so that, in response to the operating system of the terminal executing the remote control projector instruction software, the communication link causes the video data of the terminal to be supplied to the video software of the server arrangement in a format

Art Unit: 2458

comprehensible to the video software of the server arrangement [p. 14, lines 7-30, a user's request is appropriately translated according to a format, therefore the information transmitted to the web server can be processed in response to the user's request, a user request may include a request to open a broadcast channel, a request to participate in a broadcasting channel, etc.]; the server arrangement being arranged so the video data in the format comprehensible to the video software are transferred from the video software to the projector [p. 15, lines 18-30, p. 16, lines 1-16, the distribution main server processor 442 transmits a broadcasting material produced by a producer client to a viewer client].

Joo does not explicitly disclose using internet access software on the terminal so that the instructions of the remote control projector instruction software are interpreted directly in the language of the Internet access software program and executed by the operating system of the terminal, however Joo discloses the producer client 200 inputting the URL address of a site which opens a broadcasting channel for the user [fig. 1, 3, p. 11, lines 18-21, p.14, lines 7-30].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to input a URL by using internet access software on the terminal. It is well known that in order to enter a URL an internet access software must be executed in a terminal; hence an ordinary artisan would find executing a network access software obvious.

Joo does not explicitly disclose the viewer client as a projector, and the use of a dynamic host configuration (DHCP) server. However AAPA discloses a system wherein a server is connected to a projector [fig. 2].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the method of Joo by including a projector as a viewer client as disclosed by APPA because it would provide Joo's method with the enhanced capability of being able to display data to a plurality of people, allowing the system to be used in multiple environments (meetings, conferences, homes, etc.).

21. **As per claim 18**, Joo discloses the apparatus of claim 17

Wherein the terminal is arranged to respond to execution of the instructions by the operating system by displaying the video data of the terminal on a display of the terminal [fig. 3-3D, p. 12, lines 14-30, displaying video data on the broadcasting screen of the producer client].

22. **As per claim 19**, Joo discloses the apparatus of claim 17

Wherein the server [fig. 1, 4, broadcasting server 400], the communication link and the terminal [fig. 1, producer client 200] are arranged so that, in response to the operating system of the terminal executing the remote control projector instruction software, the video data of the terminal are converted by the remote control projection instruction software of the terminal into a format comprehensible to the video software of the server arrangement [fig. 1, 4, p. 14, lines 7-30, a user's request is appropriately

Art Unit: 2458

translated according to a format, therefore the information transmitted to the web server can be processed in response to the user's request, a user request may include a request to open a broadcast channel, a request to participate in a broadcasting channel, etc.]; and the converted data are coupled to the server via the communication link [p. 4, lines 27-30, p. 5, lines 1-17, transmitting the formatted data to the server].

Joo does not explicitly disclose the viewer client as a projector; and the converted video data coupled to the server arrangement via the communication link are coupled to the video software.

However AAPA discloses a system wherein a server is connected to a projector and where the data received by the network card is transmitted to video software 23 [fig. 2].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the method of Joo by including a projector as a viewer client that receives video data from video software 23 as disclosed by AAPA because it would provide Joo's method with the enhanced capability of being able to display data to a plurality of people, allowing the system to be used in multiple environments (meetings, conferences, homes, etc.).

23. Claims 5, 7, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joo, in view of AAPA, and in further view of Hsiao, U.S. Publication No. 2003/0081561.

Art Unit: 2458

24. **As per claim 5**, The combination of Joo and AAPA discloses the video-projection method as in claim 4, wherein the video data, before being sent to the server, is compressed by the file [Joo, fig. 1, 2, p. 10, lines 3-25, p. 13, lines 5-26, the encoding unit 230, inside the producer client 200, compresses the captured data to facilitate the transmission to the broadcasting server 400].

The combination of Joo and AAPA does not explicitly disclose wherein the data before being sent to the video-projector, is decompressed by the video software.

However Hsiao discloses wherein the data before being sent to the video-projector, is decompressed by the video software [fig. 1, paragraph 0025, a server containing a decoding module 440 for decoding data].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the method of Joo and AAPA by decoding the data before being sent to the video projector as disclosed by Hsiao because it would provide the Joo and AAPA method with the enhanced capability of easily displaying material stored in the computers on a screen [Hsiao, paragraph 0006].

25. **As per claim 7**, Joo discloses the video-projection method as in claim 5,

Wherein execution of the file is prompted by activating a button associated with the file execution function, and shown on the web page with which the file is linked [fig. 3-3D, p. 12, lines 6-30, a “broadcasting screen” containing a various functional buttons for activating the broadcasting].

Art Unit: 2458

26. **As per claim 8**, Joo discloses the video-projection method as in claim 7,

Wherein stopping of the projection is prompted by activation of a button associated with the stop function of the file execution function and shown on the web page with which the file is linked [fig. 3C, p. 12, lines 6-30, an end broadcasting button for ending the broadcast, as part of the initial screen of the client program for broadcasting (e.g. ActiveX)].

27. **Claims 6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joo, in view of AAPA, in view of Hsiao, and in further view of Hamlett et al. (hereinafter Hamlett), U.S. Publication No. 2004/0243818.**

28. **As per claim 6**, The combination of Joo, AAPA, and Hsiao discloses the video-projection method as in claim 5, but it does not explicitly disclose:

Wherein stopping of projection is prompted by closing the network access software on the terminal.

However Hamlett discloses:

Wherein the stopping of projection is prompted by closing the network access software on the terminal [paragraph 0037, when exiting the defined website, the navigation controllers, provided by ActiveX, will close, restoring the browser to normal].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the modified method of Joo, AAPA, and Hsiao by stopping the projection by closing the network access software on the terminal as

Art Unit: 2458

disclosed by Hamlett because it would provide the Joo, AAPA, and Hsiao's method with the enhanced capability of transmitting various types of content data through a browser, allowing the user to perform different actions by using the browser [Hamlett, paragraph 0021].

29. **As per claim 11**, The combination of Joo, AAPA, and Hsiao discloses the video-projection method as in claim 4, but it does not explicitly disclose:

Wherein the stopping of projection is prompted by closing the network access software on the terminal.

However Hamlett discloses:

Wherein the stopping of projection is prompted by closing the network access software on the terminal [paragraph 0037, when exiting the defined website, the navigation controllers, provided by ActiveX, will close, restoring the browser to normal].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the modified method of Joo, AAPA, and Hsiao by stopping the projection by closing the network access software on the terminal as disclosed by Hamlett because it would provide the Joo, AAPA, and Hsiao's method with the enhanced capability of transmitting various types of content data through a browser, allowing the user to perform different actions by using the browser [Hamlett, paragraph 0021].

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JACKIE ZUNIGA whose telephone number is (571)270-7194. The examiner can normally be reached on Monday - Friday 7:30 A.M to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Avellino can be reached on (571)272-3905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J.Z./
Examiner, Art Unit 2458

/Joseph E. Avellino/
Supervisory Patent Examiner, Art Unit 2458